

# 1. Concurrent programming (Part II)

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Concurrent programming (CC3040) 2023/2024

CISTER – U.Porto, Porto, Portugal

<https://fm-dcc.github.io/pc2324>



## Contents of this module

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## Blocks of sequential code running concurrently and sharing memory:

- What is **Scala** and why using it?
- Concurrency in Java and its memory model
- Basic concurrency blocks and libraries
- Futures and promises
- Actor model (maybe)

We will be **less formal**

- focus on concepts and programs
- study operators and libraries
- tool support with **Scala**

We will have **hands-on**

- Practical programming exercises
- Apply the concepts we learn

# Logistics

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Relevant class material and announcements will be posted on the website periodically

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https://fm-dcc.github.io/pc2324
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### Lecturers

- Nelma Moreira  
<https://www.dcc.fc.up.pt/~nam/>
- [nelma.moreira@fc.up.pt](mailto:nelma.moreira@fc.up.pt)
- office hours: tbd
- **José Proença**  
<https://jose.proenca.org>
- [jose.proenca@fc.up.pt](mailto:jose.proenca@fc.up.pt)
- office hours: Thursday afternoon

*(Please send an email the day before if you wish to meet)*

Grading will consist of:

- 40% (T1) – individual test for part 1 ( $\geq 6$ )
- 30% (T2) – individual test for part 2 ( $\geq 6$ )
- 70% (FE) – individual final exam for parts 1 and 2
- 30% (CW) – course work for parts 1 and 2
  - groups of at most 2 students
  - 10% for part 1
  - 20% for part 2

## Normal period

$$T1 \times 0.3 + T2 \times 0.4 + CW \times 0.3 \quad (\geq 9.5)$$

Mandatory 25% attendance in PL

## Extra period (*recurso*)

$$FE \times 0.7 + CW \times 0.3 \quad (\geq 9.5)$$